

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): A process for managing a photovoltaic solar module comprising a plurality of solar cells connected electrically in series between two external connections as a function of instantaneous incident light, the process comprising:

detecting at least two variable measurement signals, which depend on the incident light, on at least two solar cells spaced from each other in the solar module and defined as detection cells;

evaluating the at least two variable measurement signals in an evaluation circuit;

using a switching device slaved to the evaluation circuit, bypassing the external connections of the solar module when the difference between the measurement signals exceeds a threshold value; and

removing the bypassing of the external connections when the difference between the measurement signals is lower than the threshold value.

Claim 2 (Original): The process of claim 1, wherein electrical output signals created directly by the detection cells are evaluated as measurement signals.

Claim 3 (Original): The process of claim 1, wherein the at least two variable measurement signals are voltages.

Claim 4 (Original): The process of claim 1, wherein the at least two variable measurement signals are currents.

Claim 5 (Original): The process of claim 1, wherein temperatures detected on the detection cells are evaluated as measurement signals.

Claim 6 (Previously Presented): A process for managing a plurality of solar cells electrically connected in series in a photovoltaic module between two external connections, the process comprising:

spacing at least two of the solar cells from each other and defining the spaced solar cells as detection cells;

detecting a measurement signal from each of the detection cells, the measurement signal varying as a function of instantaneous incident light;

comparing the measurement signals in an evaluation circuit; and

bypassing the external connections of the solar module when a difference between the measurement signals exceeds a threshold value.

Claim 7 (Previously Presented): The process of claim 6, further comprising:

removing the bypassing of the external connections when the difference between the measurement signals does not exceed the threshold value.

Claim 8 (Previously Presented): The process of claim 6, wherein the measurement signals are voltages.

Claim 9 (Previously Presented): The process of claim 6, wherein the measurement signals are currents.

Claim 10 (Previously Presented): The process of claim 6, wherein the spaced solar cells are disposed proximate different edges of the photovoltaic module.

Claim 11 (Currently Amended): A solar module comprising a first module comprising:

a plurality of individual solar cells connected together electrically in series, with at least two of the solar cells being spaced from each other and serving as sensors for creating measurement signals as a function of instantaneous incident light on the solar module;

an evaluation circuit for comparing the measurement signals;

a switching device slaved at least indirectly to the sensors ~~sensor so as~~ to act on the output electric power of the solar module; and

a shunt that bypasses the series circuit of at least some of the solar cells when a difference between the measurement signals exceeds a threshold value.

Claim 12 (Currently Amended): A solar module comprising a first module comprising:

a plurality of individual solar cells connected together electrically in series,  
at least two solar cells, not integrated into the series circuit of the plurality of individual solar cells, being spaced from each other and serving as sensors for creating measurement signals as a function of instantaneous incident light on the solar module;

an evaluation circuit for comparing the measurement signals;

a switching device slaved at least indirectly to the sensors ~~sensor so as~~ to act on the output electric power of the solar module; and

a shunt that bypasses the series circuit of at least some of the solar cells when a difference between the measurement signals exceeds a threshold value, wherein the solar

cells serving as sensors are linked only to the evaluation circuit for the transferring of the measurement signals.

Claim 13 (Original): The solar module of claim 11, wherein the solar cells serving as sensors are integrated into the series circuit of the other solar cells and are linked in addition to the evaluation circuit for the transferring of the measurement signals.

Claim 14 (Original): The solar module of claim 11, wherein the evaluation circuit and the switching circuit are disposed within the solar module.

Claim 15 (Original): The solar module of claim 11, wherein the plurality of individual solar cells are provided in at least two pairs of cells with a separate switching device provided to each pair.

Claim 16 (Original): The solar module of claim 11, wherein the solar cells are connected electrically in a series circuit between two external connections, and the switching device separates the series circuit from at least one of the external connections upon activation by the evaluation circuit.

Claim 17 (Original): The solar module of claim 11, wherein the solar cells used as sensors are each disposed proximate an edge of the solar module.

Claim 18 (Original): The solar module of claim 11, wherein the switching device comprises an electromechanical relay.

Claim 19 (Original): The solar module of claim 11, wherein the switching device comprises a semiconductor power switch able to be slaved.

Claim 20 (Original): The solar module of claim 11, wherein the evaluation circuit switches the switching device into a quiescent state when substantially identical incident light is received on the solar cells used as sensors.

Claim 21 (Original): The solar module of claim 11, further comprising at least one additional first module, wherein the first modules are connected to each other in series.